

**Search**  **Find**

**Filter**  **Sort**  **Page**

**Results**  **Items**  **Pages**

**Document ID** **Issue Date** **Pages** **Title** **Current OR** **Current Ref** **Retrieval C** **Inventor** **S** **C**

145	US 6009538 A	19991228	System and method of reporting a status of	714/25	705/16; 705/20;		Goodwin, III, John C. et al.		
146	US 5937391 A	19990810	Point-service system in online shopping mall	705/14	705/26; 705/27		Ikeda, Sekio et al.		
147	US 5893128 A	19990406	Distributed work flow management	715/511			Nauckhoff, Sven		
148	US 5878369 A	19990302	Golf course yardage and information system	701/215	340/990; 342/357.08		Rudow, Richard W. et al.		
149	US 5812484 A	19981103	Database system with methods for parallel lock management	707/8	707/9; 718/103;		Sankaran, Mohan et al.		
150	US 5732400 A	19980324	System and method for a risk-based purchase of goods	705/26	705/1; 705/38		Mandler, Maria M. et al.		
151	US 5689431 A	19971118	Golf course yardage and information system	701/213	340/990; 340/995.28;		Rudow, Richard W. et al.		
152	US 5659350 A	19970819	Operations center for a television program packaging	725/116	725/118; 725/130;		Hendricks, John S. et al.		
153	US 5590056 A	19961231	Method and apparatus for computer program usage	702/186	714/38; 714/39;		Barritz, Robert		
154	US 5499340 A	19960312	Method and apparatus for	714/47			Barritz, Robert		

**Document ID** **Issue Date** **Pages** **Title** **Current OR** **Current Ref** **Retrieval C** **Inventor** **S** **C**

145	US 6009538 A	19991228	System and method of reporting a status of	714/25	705/16; 705/20;		Goodwin, III, John C. et al.		
146	US 5937391 A	19990810	Point-service system in online shopping mall	705/14	705/26; 705/27		Ikeda, Sekio et al.		
147	US 5893128 A	19990406	Distributed work flow management	715/511			Nauckhoff, Sven		
148	US 5878369 A	19990302	Golf course yardage and information system	701/215	340/990; 342/357.08		Rudow, Richard W. et al.		
149	US 5812484 A	19981103	Database system with methods for parallel lock management	707/8	707/9; 718/103;		Sankaran, Mohan et al.		
150	US 5732400 A	19980324	System and method for a risk-based purchase of goods	705/26	705/1; 705/38		Mandler, Maria M. et al.		
151	US 5689431 A	19971118	Golf course yardage and information system	701/213	340/990; 340/995.28;		Rudow, Richard W. et al.		
152	US 5659350 A	19970819	Operations center for a television program packaging	725/116	725/118; 725/130;		Hendricks, John S. et al.		
153	US 5590056 A	19961231	Method and apparatus for computer program usage	702/186	714/38; 714/39;		Barritz, Robert		
154	US 5499340 A	19960312	Method and apparatus for	714/47			Barritz, Robert		

US-PAT-NO: 5937391

DOCUMENT-IDENTIFIER: US 5937391 A

TITLE: Point-service system in  
online shopping mall

DATE-ISSUED: August 10, 1999

INVENTOR-INFORMATION:

NAME	STATE	ZIP CODE	COUNTRY	CITY
Ikeda; Sekio	N/A	N/A	JP	Kawasaki
Oka; Nobuo	N/A	N/A	JP	Kawasaki
Fujiwara; Masao	N/A	N/A	JP	Kawasaki
Miyasaka; Michihiro	N/A	N/A	JP	Kawasaki
Morita; Shuji	N/A	N/A	JP	Kawasaki
Yamashita; Masakazu	N/A	N/A	JP	Kawasaki
Egashira; Yuka	N/A	N/A	JP	Kawasaki

ASSIGNEE INFORMATION:

NAME	STATE	ZIP CODE	COUNTRY	CITY	TYPE CODE
Fujitsu Limited	N/A	N/A	JP	Kawasaki	03

APPL-NO: 08/ 864971

DATE FILED: May 29, 1997

COUNTRY	FOREIGN-APPL-PRIORITY-DATA: APPL-NO
---------	--

APPL-DATE  
JP  
1996

8-182556

July 11,

INT-CL: [06] B42D015/00

US-CL-ISSUED: 705/14, 705/26 , 705/27

US-CL-CURRENT: 705/14, 705/26 , 705/27

FIELD-OF-SEARCH: 705/14; 705/26 ; 705/27 ; 705/29

REF-CITED:

PAT-NO	U.S. PATENT DOCUMENTS	
PATENTEE-NAME	ISSUE-DATE	US-CL
<u>5117355</u>	May 1992	McCarthy
N/A	N/A	<u>N/A</u>
5774870	June 1998	<u>Storey</u>
N/A	705/14	N/A

FOREIGN-PAT-NO	FOREIGN PATENT DOCUMENTS	
US-CL	PUBN-DATE	COUNTRY
2-34079	August 1990	JP
2 274 349	July 1994	GB
2 306 740	May 1997	GB
95/12175	May 1995	WO

ART-UNIT:

274

PRIMARY-EXAMINER: Peeso; Thomas R.

ATTY-AGENT-FIRM: Staas & Halsey LLP

ABSTRACT:

A service system in an online shopping mall established through a network realizes an improvement of a service to a customer by not having to carry a magnetic card and shortening a time from issuing points to redeeming points. To attain the objects of the system, a points issuing unit issues points corresponding to the purchase amount of a customer.

A points storage device stores the number of points accumulated by the customer. A points redeeming unit reduces a purchase amount of the customer as points to be redeemed. A points issue ratio and a points redeeming ratio can be set for each shop forming part of the online shopping mall.

30 Claims, 19 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 19

US-PAT-NO: 5937391

DOCUMENT-IDENTIFIER: US 5937391 A

TITLE: Point-service system in  
online shopping mall

----- KWIC -----

Brief Summary Text - BSTX (8):

Recently, customers buy goods not only in shops but also through network services using telephones, personal computers, etc. Furthermore, goods can be displayed through a network, for example, on a customer terminal connected to, for example, the Internet, so that a customer can do shopping through the terminal. When goods in a plurality of shops are displayed on the screen, the shopping mall formed of such shops is referred to as an online shopping mall. In such online shopping malls, no points services have been provided for a purchase in a shop.

Brief Summary Text - BSTX (11):

However, in the point-service system using such a magnetic card, the customer has the problem that he or she has to necessarily show the magnetic card when he or she buy goods. Furthermore, the counting adjustment between a points issuing shop and a points redeeming shop is performed in a nighttime batch process through the host center, even if the

accumulation result of the service points is recorded on the magnetic card. Therefore, the points record is not practically updated before the day after the shopping. Accordingly, it is inconvenient when exchanging the points for an awarding gift, and it takes a long time to adjust the records between a points issuing or award shop and a points redeeming shop.

Brief Summary Text - BSTX (13):

The present invention aims at realizing a point-service system in an online shopping mall established through a network to solve the above described problems by, for example, eliminating the necessity for a customer to carry his or her own magnetic card, improving the quality of the service for customers by shortening the time required from the issuance of points to the redemption of the points. Furthermore, the present invention aims at activating sales in the online shopping mall, improving the quality of the services for customers, and realizing an attractive online shopping mall crowded with customers by, for example, altering the points issue ratio or the points redeeming ratio at each shop or in a specific season.

Brief Summary Text - BSTX (18):

When a customer decides to buy goods through a home page of an online shopping mall according to the present invention, the number of effective accumulated points of the customer issued by a number of shops to the customer

is displayed on the customers terminal by referring to the data of each shop forming part of the online shopping mall. If the customer selects a shop on the display screen and clicks a shopping button, then an order input screen is displayed and the customer inputs order data on the order input screen. Then, the customer clicks the order button, and the point-service system linked to the Web server of the online shopping mall is activated to issue points or redeems points at the instruction of the customer when he or she inputs an order.

Detailed Description Text - DETX (8):

When each shop joins the online shopping mall, it is displayed on the home page of the online shopping mall that each shop can be provided with a point-service.

Detailed Description Text - DETX (13):

FIG. 2 shows an example of the configuration of the network for realizing a point-service system in an online shopping mall 10 according to the present invention. In FIG. 2, a plurality of servers 11, 12, and 13 form a network, for example, the Internet. For example, the server 11, that is, a Web server, provides the online shopping mall 10. A server file 14 for storing a points management table and a shop management table, to be described later, for storing the points data and shop data in the point-service system, is connected to the server 11. For example, the server 12 is

connected to a conventional online shopping mall through a network. Customers d, e, and f use the server 12, and can access the conventional online shopping mall or the online shopping mall 10 having the point-service system according to the present invention.

The online shopping mall 10 is assumed to comprise the shops A, B, and C. In this example, the point-service system is described by referring to an example in which the shops do not have their own servers. However, the shops can also have their own servers, and can simultaneously enter another online shopping mall.

Detailed Description Text - DETX (14):

FIG. 3 is a block diagram showing the configuration of the system of an online shopping mall for realizing the present invention through a network. In FIG. 3, the online shopping mall comprises a Web server program 15 in the Internet; a database 16, corresponding to the server file 14 shown in FIG. 2, for storing data of a points management table, a shop management table, etc., to be described later; and a common gateway interface (CGI) program 17 as an interface program between the Web server program 15 and the database 16.

Detailed Description Text - DETX (17):

FIG. 4 is a block diagram showing the configuration of the point-service system realized in the online shopping mall. In FIG. 4, a point-service system 20 comprises a server file 21 for storing a points



management table for storing the number of points of a customer of an online shopping mall for each customer, each time points are issued to the customer, a shop management table for storing a points issue ratio and a points redeeming ratio for each shop forming part of the online shopping mall, etc.; a points issuing process performing unit 22 for issuing points each time a customer buys goods; a points redeeming process performing unit 23 for redeeming points for a customer at the request from the customer, and reducing the purchase amount for the customer; and a patrol process performing unit 24 for monitoring, for example, the term of the points assigned to the customer and notifying a customer by mail when the term of his or her points is close to expiration.

Detailed Description Text - DETX (22):

2. the Web server program 15 (FIG. 3) in the mall server transmits as HTTP data (HTML file) the screen data of the online shopping mall to show the data of each shop in the online shopping mall, the number of points issued by each shop to the customer, etc. in response to the request, whereas the customer displays the data on the screen based on the received HTTP data,

Detailed Description Text - DETX (34):

FIG. 8 shows an example of the points management table. As shown in FIG. 8, the table stores the number of points for each customer of the online shopping

mall, for each shop which provides a point-service.

That is, each time points are issued, the issue date (purchase date), effective term, number of points, issuing shop (where the customer buys the goods), and the value of the effective flag are stored. If the effective flag is set to 0, it indicates that the goods have been purchased and the charge has not been paid yet, that is, the charge is to be paid later, for example, on credit, transfer from the account of the customer, transfer to the account of the shop, etc., as described later.

Detailed Description Text - DETX (44):

FIG. 11 shows a shopping input screen displayed after a customer optionally selects a shop on the screen shown in FIG. 6. FIG. 12 shows the HTTP data for use in displaying an input screen. The HTTP data of the input screen contains the customer ID input by the customer on the initial screen of an online shopping mall and the identification information about the shops. That is,

```
<FORM METHOD=POST
ACTION=http://www.mall.aaa.co.jp/cgi-bin/program-a&
shown in FIG. 12 indicates that the customer
requests the server
www.mall.aaa.co.jp to execute program-a after the
data is input on the input
screen. Furthermore, <INPUT
TYPE="hidden"NAME="personal-ID" CHECKED
VALUE="aaa0001"> defines an object to be
transmitted as a parameter when
program-a is executed at the request. That is, it
is defined that the data
personal-ID=aaa0001 (indicating that the customer
```

ID is aaa0001) is to be transmitted. The `INPUT TYPE="hidden" indicates that the data is not displayed. Similarly, &lt;INPUT TYPE="hidden" NAME="store-ID" CHECKED VALUE="SPACE DEVELOPMENT"&gt; defines an object to be transmitted as a parameter when program-a is executed at the request. That is, it is defined that the data store-ID=SPACE DEVELOPMENT (indicating that the name of the shop is space development) is to be transmitted. The `INPUT TYPE="hidden" indicates that the data is not displayed.

Detailed Description Text - DETX (49):

When it is determined in step S20 that the shop provides a point-service, it is determined in step S21 whether or not the customer requests a redemption using the accumulated points, and whether or not the number of the accumulated points has reached the minimum value for a redemption. Unless both of these conditions are satisfied, no redemption is made. When no redemption is made, after the purchase amount is defined as the payment amount in step S22, the number of points is computed in step S23. That is, the number of the points corresponding to the purchase amount is computed at a points issue ratio of the corresponding shop. The minimum value of the points for a redemption can be either commonly defined within an online shopping mall or individually set by each shop.

Detailed Description Text - DETX (63):

FIG. 19 shows an example practically showing the point-service system in an online shopping mall according to the present invention as the configuration of the system in a computer environment. FIG. 19 shows the point-service system as a summary of FIGS. 2 through 4, illustrating the configuration of a WWW server 30, a network 31, a plurality of WWW browsers 32, and a database 33. The WWW server 30 comprises an HTTP server 34 for performing a process based on the above described HTTP protocol, a CGI program 35 for performing the processes of a points issuing process performing unit, a points redeeming process performing unit, and a patrol process performing unit, and a database management system (DBMS) 36. The database 33 stores a points management table, a shop management table, an adjustment redeeming points storage table, etc.

Detailed Description Text - DETX (64):

Clicking the mouse of a remote shop which is displayed in the home page of an online shopping mall, but is not entered in the online shopping mall, can access the home page of the shop. In this case, the purchase information is simultaneously input to the database linked to the home page of the online shopping mall and the database linked to the home page of the shop. If the shop enters the online shopping mall, the purchase information stored in the database linked to the home page of the shop is also transmitted to the database linked to the home page of the online shopping mall using the existing

network transfer command. In this case, the customer can access the home page of the shop from the home page of the online shopping mall, enter a request to receive a point-service from the online shopping mall each time the customer buys goods in the shop, and then use the point-service system even if the customer buys goods directly through the home page of the shop. Furthermore, each shop can easily provide a customer with the latest goods in the shop by constantly updating the database linked to the home page.

Detailed Description Text - DETX (67):

As described above, the merits to the customers of the point-service system of an online shopping mall according to the present invention are that it is very convenient for a customer to buy goods through a network without a transportation fee to the shops, various services such as immediate redemption by points when the customer buys goods are provided, no cards are required when buying goods, the current number of the points can be easily computed, services can be improved for the customers through competition among the shops in the online shopping mall, etc.

Detailed Description Text - DETX (68):

The merits to the shops in the online shopping mall is that the sales amount can be increased by inviting a number of customers to the online shopping mall, it is not necessary for the shop in the online shopping mall to preliminarily

buy points, the shops do not have to issue any cards, each shop can provide a customer with their own and attractive services, thereby serving to further develop the online shopping mall.

Claims Text - CLTX (39):

inter-shop redeeming points adjusting means for adjusting redeeming points among a plurality of shops forming part of the online shopping mall based on a number of redeeming points, a name of the specific shop, and names of other shops, for points issued by the other shops in the redeeming points used by said points redeeming means when a customer buys goods at the specific shop.

Claims Text - CLTX (41):

an adjustment redeeming points storage table for storing, for each shop forming part of the online shopping mall, a number of points X issued by the specific shop and used for a redemption at another shop, and a number of points Y used for a redemption at a specific shop but issued by other shops, wherein

Claims Text - CLTX (46):

online shopping mall display control means for controlling display for each customer, when a customer is buying goods in the online shopping mall, in such a way that data of each shop forming part of the online shopping mall is displayed with a number of points unused for a redemption within points issued to each customer by a shop which provides a

point-service in the online shopping mall.

Claims Text - CLTX (48):

said online shopping mall display control means controls the display of the data of each shop forming part of the online shopping mall in order from a shop having a largest number of points unused for a redemption.

Claims Text - CLTX (50):

online shopping mall display control means for controlling display, when the customer is buying goods in the online shopping mall, of data of each shop forming part of the online shopping mall in a format clearly indicating whether or not each shop provides a point-service.